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LEADING ARTICLES

THE CRUSADE AGAINST CANCER OF THE UTERUS.

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The object of this paper is to review the literature of the work that has been done to assure an early diagnosis of uterine cancer in the hope that those who may chance to read the work will be sufficienlty interested to take extra precautions in their examinations and not overlook the early symptoms of cancer of the uterus. In reviewing the literature as much repetition as possible will be avoided, but a certain amount must necessarily occur so that the views of the different observers may not be destroyed.

The statistics of today show that cancer of the uterus supply about 20 per cent of all gynecological patients; that out of 100 patients with cancer applying for treatment, only 25 per cent are suitable for operation. Taking the five years after operation as the time before which a cure can be said to have been attained, hysterectomy will lead to a definite cure in about one-fifth of the cases in which it is employed. Such a result, taken in conjunction with the fact that a large number of patients present themselves for treatment too late for the possibility of obtaining a radical cure, leads to the conviction that if only the patients could be secured early enough a great many valuable lives could be saved. The reasons why patients seek advice too late for the possibility of operation are many. The chief reason is the belief that irregular hemorrhages after or about the time of menopause are normal events to "Change of Life." This belief is held not only by a large number of women, but unfortunately by a large number of medical practitioners. I have frequently heard a mother tell her daughter that the menopause would come with long and irregular bleeding as this was the manner in which she and her mother before her had passed the critical stage. Statements like the above are dangerous. It is rather hard to conceive the origin of such information. Unless it is an exaggeration of the fact that some women have a slight increase of the menstrual flow several periods before the flow ceases entirely. In this class of women a hereditary history with the tendency to bleed can always be obtained. Moreover, a slight increase of the menstrual flow is entirely different from a profuse and lasting hemorrhage. In carefully looking into the history of the grandmother in one instance it was found that she had died of what was called "Hemorrhage from the Womb" at the age of 60 years. In all probability a cancer of the uterus.

The only good explanation of these erroneous ideas is a lack of education, and the responsible parties for this lack of education are the practitioners themselves. It is not with the laity to diagnose disease, but there is no good excuse why the general practitioner should not be sufficiently educated to know that irregularies of the menstrual period at or about the menopause are signs and symptoms not to be overlooked and treated in an indifferent way, or to be looked upon as natural, but symptoms that demand a thorough investigation. I have heard practitioners remark, after a diagnosis of cancer of the uterus had been made, in a patient advanced far beyond the limits where operation could be of any avail, "I have known her to have a cancer for a long time, but was afraid to tell her, being fearful of the excitement that would fol-

low." How much better it would have been (if his statement were true) to have informed her in the early stages of the disease and urged an operation that may have saved her life.

In Germany, Winter of Koenigsberg (Ueber die Fruhdiagnose des Uterus Krebses, Berl. klin. Wochenschrife, 1891, Vol. xxviii, Zentral. fur Gyn., 1904, No. 14) in three separate papers waged a most vigorous crusade against cancer of the uterus. In December,1902, he issued to every doctor in East Prussia a phamplet urging them to make a thorough and painstaking examination in all suspicious cases. He also sent leaflets to midwives pointing out the symptoms of uterine cancer and urging them to send to their physicians all patients who presented any such symptoms. In addition to this, he published in the most popular newspaper "A Word of Advice to Womankind," in which the significance of irregular hemorrhage, etc., was given and all patients having any suspicious symptoms were urged to go to their physicians for advice and to act upon the advice given without any possible delay. To operating gynecologists he wrote asking them to keep a register of their cases. The result of all this was that by the end of the year he had collected records of 84 cases. These he analyzed and found the results very encouraging. From this appeal more medical men had responded and they showed a disposition to be more careful in the local examination of their patients. In doubtful cases a microscopic examination was made of portions of the cervix and of curettings of the uterus.

With regard to cases coming under midwives he also found that his appeal had proved beneficial in that the percentage of cases treated by midwives was distinctly lower than in previous years. The test of the effect of his appeal to the public he based on two points, viz: (1) the time which elapsed before the patient's first knowledge of cancerous symptoms and her seeking medical advice; (2) the time which elapsed from the moment advice was given to the date when it was acted upon.

On both these points he found a very marked improvement. The influence of the appeal on the percentage of cases suitable for operation was found to be 74 per cent in 1903 as compared with 62 per cent in 1902. This is open to criticism. While it may be assumed that good results would be obtained from such liberal advertising, yet 12 per cent increase seems a rather large one.

In 1899 Duhrssen (Deutsche Med. Wochen, 1899, Deutsche Arztzeitung, 1899, Aetzlicher Ratgeber, 1900) wrote a paper on the "Prevention of Cancer" which recommended the publication of a popular brochure dealing with the leading symptoms, etc. In 1900 he published such a brochure, and this was subsequently issued as a monograph. In 1892 he published in the "Hygenic Calendar for the Home" a paper entitled "The Prevention and Cure of Abdominal Cancer in Women."

In Austria, the Austrian Cancer Committee published and distributed to all midwives a paper "Principiis Obst." (Wien. klin. Wochen, 1905, A. Fraenkel). In this stress is laid on the absolute importance of an early diagnosis in all cases of malignant disease. As long as the disease is local, it is curable by means of a radical operation. Doctors are said to be more to blame for not insisting on a thorough examination of patients presenting suspicious symptoms and are urged to dismiss from their minds the idea that the disease is incurable.

Lewers (Cancer of the Uterus, 1902) in a preliminary note to his book suggests that something of a practical nature might be done in making women familiar with the early symptoms of cancer of the uterus. He records bleeding as the first symptom in a large majority of cases and considers that if women generally understood that the occurrence of bleeding between the menstrual period or after the menopause might be due to a cancerous growth in the womb, a considerable proportion of them would lose no time in seeking competent medical advice. He asks the question "in what way can the better education of women on this subject be brought about?" In answer to this he suggests that a cancer commission might issue a leaflet containing the essential facts that are desirable for women to know. The distribution of such leaflets might then be undertaken by the medical profession. Such a method, though far from ideal, would cause a great commotion in a large number of nervous women, but the undoubted good that would result in saving thousands of women from an untimely death from cancer of the uterus, would counterbalance any minor nervous disturbances from which a few might suffer.

Wilson attributes the failure of an early diagnosis of cancer of the uterus to a great extent to lack of knowledge on the part of the medical practitioner and to a lesser extent with the patients themselves who from modesty, poverty, and the fact that midwives and nurses persuade them that all the symptoms are due to "Change of Life."

content themselves with this belief and do not seek competent medical advice. This prevailing ignorance must be swept away and the significance of such symptoms must be thoroughly grasped and then impressed through the medium of nurses and midwives on women in general. It behooves us therefore to make a close study of the earlier symptoms of the disease, and in every woman who presents any suspicious symptoms to insist upon an immediate and thorough exploration, and the results of our examination must be conclusive; where any doubt exists a microscopic examination of the tissues should be made.

W. D. Haggard (American Jour. Obst., Dec., 1897) lays great stress on the importance of women nuderstanding all about the menopause. He suggests that this may be accomplished by every medical man teaching all his female patients about the normal and the abnormal things that may occur at such a time. He concludes by saying the profession must see to the following points:

1. The education of women as to the danger of cancer at the menopause.
2. The early interpretation of suspicious symptoms.
3. Surgical interference.

Maier of Boston (New York Medical Journal, April, 1903) considers two important points to be reckoned with in bringing patients earlier for advice, viz: (1) the physician; (2) the patient.

1. With regard to the physicians he urges great care on their part, and points how necessary it is for them to efface the prevailing dislike of patients to seek advice and to undergo operation.

2. Women must be taught the symptoms and urged not to regard irregularities and profuse hemorrhages as normal accompaniments of the menopause. He points out the coincidence that those who suffer from "Cancerophobia" are generally those who are exempt from the disease due to the fact that such patients speedily consult their physicians and are thus examined and irregularities are treated. Craig (New York Medical Journal, July 8, 1905, "Trained Nurse," etc., New York, 1903) in a paper entitled "The Early Detection of Uterine Cancer," urged first of all the necessity of repairing all surgical lacerations. He believes that when repaired the cervix reverted to the same liability to carcinoma which obtains in a normal nulliparous cervix. He also published a paper on the subject in the "Trained Nurse" setting forth the importance of leucorrhea or rather increase in the leucorrhea that women habitually have as the first symptoms. He urges the doctor to meet all symptoms with suspicion until they disappear. He further urges investigation of any variation from the following ways in which the menopause usually occurs:

(1) suddenly;
(2) by gradual lengthening of the intervals;
(3) by a gradual diminution in the amount.

To denote a lesion which must be discovered, F. F. Simpson points out that out of every 28 women who pass the age of 30, one will be the victim of cancer of the uterus, and advises a quarterly examination of all women who have passed this age as a precautionary method against cancer.

Few women would fail to submit to this examination if the essential facts about uterine cancer were made known to them by the medical men. He recognizes the risk of giving too much publicity to medical matters for the truth is easily distorted. "We may not commit the greater error of undue conservatism."

Sampson (Jour. A.M.A., Chicago, 1905, Vol. xliv) expresses the opinion that the early diagnosis of cancer of the uterus can be best obtained by the proper education of the medical profession who in turn should educate the public. Physicians must be taught the great importance of making a diagnosis and the fact that a local examination is quite essential for this.

At a meeting of the International Congress of Arts and Sciences held in St. Louis on September 24th, 1904, the Gynecological section passed a resolution requesting the American Medical Association to suggest means for increasing the percentage of cures of uterine cancer. The committee was formed and submitted a report to the House of Delegates at the Portland meeting of the Association. The report was adopted and the matter referred to a committee. The committee then suggested that a letter should be sent the individual members of each county medical society asking them to give the report of the committee (which was sent under separate cover) their most careful consideration. The report was a brief but true and accurate recital of the facts regarding cancer in general and cancer of the uterus in particular.

A commission has been formed in Sweden to investigate the question of cancer of the uterus before the public by means of the circulation of pamphlets, viz: (a) "The Diagnosis and Examination of Cancer of

the Uterus," (b) "A Few Words of Advice to Midwives."

Dr. H. J. Boldt in an oration on surgery delivered at the Medical Society of the Missouri Valley, St. Jospeh, Mo., March 18th, 1909 (Medical Herald, April, 1909), discussing the symptoms of cancer of the uterus, states that it is deplorable that those symptoms of putrescent leucorrhea, bleeding, and cachexia are still foremost in the minds of most general practitioners. In nearly ever case when these symptoms are present, the doom of the patient is sealed, while the early symptoms, such as spotting or an increased flow of blood at the menstrual period, or perhaps a slight atypical bleeding at or near the menopause are overlooked or misinterpreted because the medical practitioner does not take the trouble to make an examination to find out the cause of these pelvic symptoms. He classifies the symptoms in the order of their appearance in cancer of the uterus, the earliest of which his an increased vaginal discharge, bleeding, and pain last of all. He urges that it is the duty of every physician who has a patient having any one symptom of cancer of the uterus to make a positive diagnosis. The physician must fully realize that cancer in the beginning is a local disease and that it usually can be cured if properly treated at that time.

Prof. Pastalozza, Rome (L'Genecologie Moderna, Oct., 1908) urges the active propaganda throughout Italy in order to familarize the people with the insidious onset of cancer of the uterus, the all-important necessity of an early diagnosis and early radical abdominal hysterectomy according to the methods of Wertheim and Freund. The people must be taught that only initial cancer of the cervix is curable and that in all advanced cancers even the radical operation is only palliative.

Hence we may conclude by saying that the most essential factor for successful treatment of cancer of the uterus is an early diagnosis. This may be accomplished best by the medical practitioners making careful and painstaking examination of their patients. In doubtful cases a microscopic examination of the tissues should be made. They should instruct their patients as to the manner in which the menopause occurs, viz., suddenly, by gradual lengthening of the intervals, or by gradual diminution in the amount, and they should be cautioned to seek advice without delay if irregularities from the foregoing occur.

2003 McCulloh St.

LITTLE STORIES OF PHYSICIAN AND PATIENT.

Pointed, Pithy, Pungent, Phunny, Pertinent Paragraphs Particularly Pertaining to Physician and Patient—Stories Seen, Gleaned, Humorous Odds and Ends from Various Sources, Eptomized, Adapted, Elaborated, Etc.

ALBERT HERRON MOODRICKER,

WABASH, IND.

(WRITTEN FOR THE MEDICAL FORTNIGHTLY.)

By way of foreword, so to speak, ere starting these "Little Stories of Physician and Patient," it may not be amiss to remark that, frequently—in fact, "then some"—laymen who have had occasion to liquidate the bills of surgeons upon whom they have called in extremities to use the knife are heard to complain against what they term—and, forsooth, rightly, in some instances—"the exorbitant charges of surgeons."

As already indicated, perhaps in isolate cases such may be the truth. As is known to the practitioner, a skilled surgeon may charge $250 for a simple appendicitis operation—and, worth it, too! The patient, however, upon his convalescence, objects strenuously, saying "it is outrageous for a surgeon to charge $250 for half an hour's work."

Undoubtedly the question of surgeons' fees is very often puzzling to the patient—he does not see wherein a surgeon with a wide reputation, may, for instance, charge only $100 for a given operation in a case of appendicitis, and, again, another surgeon, equally as good a reputation, etc—or, perhaps, even the first-mentioned doctor—charge as high as $1,000 for the same operation in another given case.

Truly, he cannot figure it out—the why and wherefore. Yes, they forget the obvious fact, that surgeons of known ability and national, yea, perhaps international reputation—international fame—have, as is known to the profession, a general plan in charging for operations, the price ranging from nothing to, say, $5,000 and "then some."

Needless to say, almost, they will operate without any question of willingness or ability to pay, particularly where the exigency of the case demands promptness, etc. Afterwards they will present the bill—as to whether it is "paid in full"—or, never! —"that's another story," as wasn't said by Sherlock Holmes, the friend of Dr. Watson, but the well-known Rudyard K—.

As stated, the general public cannot comprehend the "why and wherefore" of a surgeon charging one man $50, another $250, and another $5,000. However, as also already indicated, physicians and surgeons have fixed a price scheme, so to speak; they aim, as a general rule, to charge the patient about one month's income. As is generally known, it is figured that any person who is in such a bad condition as to be forced to submit to a surgical operation certainly can, or should, afford to give one month's income. I take it, again, as a general rule, it is ascertained, roughly, what is the average income that a man makes the month and, accordingly, send in a bill for that amount. For instance, the man whose income is but $50 the month pays $50; the man who gets $5,000 is asked to pay $5,000, with, of course, the concomitant result that he objects—objects strenuously at times—notwithstanding that he should know that his life is worth as much proportionately as that of his less-wealthy fellowman.

Apropos, payment of medical bills, etc., here's something that I glean from Leslie's Weekly, substantially to the effect:

"Doctor," said the convalescent smiling patient though still somewhat weak, "you may send in your bill any day now."

"Tut, tut!" replied the M. D., wise as to his patients, and silencing this particular one with a wave of his hand; "you're not strong enough yet."

Speaking of the "sick list," here is something that, withal, not strictly medical, is "quite good," namely:

"Gunner—There goes old Skinem the lawyer. He draws up a great many wills and has a great many patients.

"Guyer—Patients? You must be thinking about a doctor. Lawyers have clients; patients are sick people.

"Gunner—Well all his patients are sick before he gets through with them."

The following I glean from the daily press and is a story of "A Bad Mix-Up:"

"Say," remarked one government clerk to another, "I'm up against it good and proper."

"What's the trouble?" queried G. C. No. 2.

"I got two medical certificates from two different doctors yesterday," explained the party of the first part. "One was a certificate of health for a life-insurance company and the other was a certificate of illness to be sent to my chief with a petition for two weeks' leave of absence."

"Oh, that's nothing," rejoined his fellow clerk, "I've done that myself." "Yes," continued the other, "but I mixed the certificates in mailing. The ill-health cretificate went to the insurance company and the certificate of good health went to my chief. See?

Naturally, the mixing of the certificates, produced quite a difference in the result desired; and, speaking anent thereto, here, too, is a story wherein there lay a considerable difference, viz.:

Dr. Emily Blackwell, one of the pioneers in her sex in medicine, heard a young physician deliver a fierce diatribe against opening the doors of the profession to women. When he ceased, she asked:

"Will you please tell me one reason why they should not practice medicine?"

"Certainly, madam. They haven't the muscle, the brawn, the physical strength."

"I see, sir. Your conception of a sick-room is a slaughter house. Thank you for your elucidation—thankful also that, to the average man of intelligence, your conception of a sick-room is woefully wrong; decidedly so!"

Apropos, sick-room, said a physician, recently: "Only a hand mirror should find place in a sick-room, and it should be flattering to the patient—the kind, for instance, which if the face is too broad will lengthen it a little. And the patient should only be allowed to look in the mirror at propitious times. Many a patient has been frightened literally to death by his haggard reflection—has looked, sighed and renounced hope. But many another patient in a really bad way—really desperate, too—being given a look at himself just after he has taken a stmiulant has bucked up wonderfully. In fact, a sick-room mirror wisely handled is a curative agent, while recklessly handled it may kill."

Over in the Rose building, Cleveland, Ohio, which, by the way, is filled with doctors—therefore, this story—a young lawyer has his offices. This lawyer vouches for this one:

As he sat in his office the other afternoon, juggling a copy of Blackstone, a young woman dashed into his office. In a moment, before he could realize what had happened, she had bared a dainty ankle. "Are those mosquito bites or hives?" she asked him, indicating some eruptions that were, however too slight to mar seriously the ankle.

"I should prefer to look it up," said the lawyer, thinking that what she had just

shown him might turn out to be Exhibit A in a divorce case that she desired to file. Perhaps her husband had neglected to provide mosquito bars in their once happy home and the bites were one of her grounds for action.

But further inquiry blasted the divorce theory. The client was seeking the doctor next door.

Speaking of the "woman in the case," of course the writer or complier of these Little Stories of Physician and Patient would not think of setting himself up in judgment, nevertheless it cannot be gainsaid that, in this particular case, the doctor not only lost the practice in this family, but a lot of other families, inasmuch as the woman, naturally, "told everybody all about it." No! no mother would withstand a "slam" at her baby no matter what the justification; and, anyway, as the doctor tells the story himself the writer or compiler—just as the reader chooses—cannot be accused of slandering anybody.

One day a lady came to him with a sick baby, and he told her to go home and give the baby a dose of castor oil. She was indignant. "What! Common castor oil for my baby? Why that's such an old-fashioned medicine!" Then spoke the doctor: "Yes, madame, it's old-fashioned, and babies are old-fashioned, too; so old-fashioned that with most of you they have gone out of fashion, along with commonsense and some other things." She never called him to attend a member of her family again. Do you wonder why?

Certainly the doctor does not wonder why—why should he, hasn't he, too, had similar experiences? Certainly, and, at least, it can be truthfully said the physician in question spoke briefly, abrupt, concise, and to-the-point-of-the-focus! And, anyway, the provocation was great!

Apropos, provocation, reminds me of a little story in which a certain party at least had a "certain incentive," namely: "Hope:"

"Doctors often scare people to death by letting them know how dangerous their maladies are," said the white-haired physician.

"Say, doc," the young man replied, "would you mind coming with me to diagnose my rich old uncle's case? And I'd be willing to double your fee if you would speak right out plainly in case you found anything serious the matter with him.

An old toper, afflicted with dropsy, was advised to be tapped. His little son objected, saying:

"Daddy, don't you let them, for you know there was never anything tapped in this house that lasted more than a week."

Here is a story in which the physician's orders were followed "religiously." It is from the Philadelphia Ledger:

SHAVED OFTEN.

"You must drink hot water with your whisky," the doctor told his patient, otherwise you mustn't take it at all."'

"But how shall I get the hot water?" the patient queried plaintively. "My wife won't let me have it for the whisky toddy."

"Tell her you want to shave," the doctor said, and took his departure.

The next day the doctor called and asked the wife how the patient was.

"He's gone raving mad" his wife replied. "He shaves every ten minutes."

Speaking of spirits frumenti, here's a limerick taken from the American Journal of Clinical Medicine that may be appropriate here:

"My character I must maintain,
Of reputation I've no lack,
To cultured minds it must be plain,
I'm the boss dipsomaniac."

And so, and thus, it's made plain,
To thoughtful minds, and those prepared,
Sermons from stones one may oft gain,
Just as the poet has declared.

At this point in my compilation of these Little Stories of Physician and Patient, I am reminded that, undoubtedly, many a country doctor enjoying a lucrative practice imagines he would be a "world beater, financially," were he only located in a large city. True, perhaps, by discarding all medical ethics—using printer's ink—advertising himself as a "quack" or "specialist." However, speaking of specialist, a country physician had a particlar patient with a sore throat, and, after examining it, told her to use a gargle of salt and water. He declared that this didn't suit her—it was too simple. Then he told her to come to his office, and he would spray the affected part with a solution of chloride of sodium and aqua pura. That seemed to suit her, and he kept it up for a long time, and each time collected his little two dollars. This gave him an idea—had to get it from a woman, of course! He went to Europe, and when he returned he announced that he had made a throat specialist of himself, and the salt and water was all there was to it.

[To be continued.]

SELECTED ARTICLE

A STUDY OF THE URINARY ACIDITY AND ITS RELATIONS.*

HENRY R. HARROWER, M. D.

CHICAGO.

The estimation of the urinary acidity has in the past been considered a more or less useless procedure, the simple test with litmus paper sufficing for all purposes. The study of this subject does not seem to have received nearly the attention that it deserves, and it is to be hoped that this paper will serve to emphasize the fact that the quantitative examination of the urine for acidity is a most important procedure and a part of the urine examination which should always be carried out.

The mixed 24-hour specimen of urine is normally acid in reaction, this condition being principally due to certain acid salts, in particular diacid sodium phosphate, NaH_2PO_4. The acidity is probably due, in a measure, to other acid salts which are also present, although in considerably smaller amounts. The experiments of Voit and others have conclusively proven that uric acid has nothing to do with urinary acidity.

The index of urinary acidity undoubtedly varies in direct ratio with the metabolic changes going on in the body. The manufacture, as waste products, in the body cells of acid substances—of which sulphuric acid is probably the most important—must have a decided influence upon this factor. In addition to this, certain products of intestinal putrefaction when absorbed into the blood are eliminated in the urine and thus serve, as will be shown later, to increase its degree of acidity.

Several factors cause the normal urinary acidity to vary considerably, such as an exclusive meat diet; excessive muscular exercise; highly concentrated urine, due, perhaps, to febrile conditions, after free perspiration, or diminished water drinking. Then, too, the internal administration of acids, such as benzoic, phosphoric or boric acid, and the presence of abnormal fatty acids resulting from pathologic conditions also play their part.

Undoubtedly the degree of acidity of individual voidings of urine is quite irregular, and in order that the physician in his diagnostic work may gain an accurate idea of the elimination and metabolism of his patients, it is distinctly necessary to make an examination of a part of a mixed 24-hour specimen of urine. This point cannot be too strongly emphasized. The urinary examination is usually not made nearly as frequently as it should be, and, unfortunately, when the physician realizes the necessity and importance of this procedure, he rarely bothers to have his patient make a complete 24-hour collection and take a specimen from it. One of the most common factors which has to do with the degree of urinary acidity is the concentration of the urine. That is, if the amount of urine is large, it is normally faintly acid, while on the other hand, if the amount is below the average, the acidity should be relatively higher. While this is usually the case, it must not always be depended upon, because it is a very frequent occurrence to find the urine of patients passing considerably above the normal amount, even as high as three or four thousand cubic centimeters per diem, to evidence a considerable increase in the degree of acidity. In fact, an examination of a series of specimens of urine from diabetics and patients suffering from those forms of Bright's disease which are associated with the passage of large quantities of urine, leads me to believe that this depraved condition of metabolism is constantly associated with such conditions as are evidenced by an excess of acidity due to the increased amount of acid substances eliminated by the body-cells.

Dr. A. L. Benedict of Buffalo, N. Y., (1) mentions a factor which I think should be much more frequently used and given more publicity. I refer to the term, "acid unit." An acid unit practically is determined by the relation of the acidity of a whole 24-hour specimen to the amount, thus: 1 c.c. of urine with an acidity of 1 deg. or 1 c.c. of urine exactly neutralized by 1 c.c. of decinormal sodium hydrate solution is equivalent to 100 acid units. Dr. Benedict believes that the average urine is from one-fourth to one-half the equivalent of the decinormal strength, and that the normal acid elimination in 24-hours should be about 40,000 acid units. This I believe is a very good average figure. It means that with one liter of urine the average acidity would be 40 deg., each degree representing the amount of decinormal sodium hydrate solution required to neutralize 100 c.c. of urine. On the other hand, 1,300 c.c. of urine with an acidity of 30 deg. gives us practically the same number of acid units. The same is true of 800 c.c. with an acidity of 50 deg. It can readily be appreciated, however, that this last figure cannot be normal, as

*Reprinted from the Medical Record, June 5, 1909.

the total amount of fluid passed is too low, and consequently the acid-index too high.

As has been said before, the accurate estimation of the urinary acidity is a matter of vital importance, and by making much more frequent use of it the physician will gain many valuable pointers which will enable him to treat his patient more successfully.

It is unfortunate that so little attention is given to the value of this examination. There are many statements similar to the following, taken from recent books on the subject: "For the practitioner the mere determination of the presence of an excess of acid or alkali by litmus paper is sufficient." (2) "For clinical purposes the litmus test is sufficient. In view of the many variable factors that determine the reaction of the urine—it is usually an altogether futile task to determine the urinary acidity by titration." (3) This is a decided fallacy. The examination of a large number of specimens of urine associated in every case with the clinical findings present in the individual passing these specimens shows conclusively that many unpleasant symptoms and even dangerous conditions are associated with, if not actually caused by, high urinary acidity and those disturbed metabolic conditions causing it. It is well known that the urine is usually intensely acid in rheumatic conditions as well as in acute fevers, due in all probability to the increased manufacture of acids in the body tissues (a hyperoxidation of the body-cells) and, of course, the usual decreased amount of fluid secreted by the kidneys. That increased urinary acidity is distinctly abnormal seems to me to be proven by the findings which are given below.

In a series of over 250 analyses the average urinary acidity was 60 deg., the lowest being 10 deg. and the highest 274 deg. (These specimens were examined in routine laboratory work.) Many of these individuals were passing urine with an acidity from 300 to 500 per cent of the normal and with an acid-unit-index of from 100,000 to 200,000 per day (the minimum in this series being 8,030 and the maximum 358,050) very much above the normal amount.

The other findings show that in 35 per cent of these cases casts and traces of albumin were found; and in 83 per cent of these cases indican was present to a greater or less extent, usually in large amounts.

Eighteen of this series evidenced glycosuria with a sugar content varying from 0.3 to 13 per cent. In these cases the average acidity was 77 deg., with an average acid unit elimination of 132,130—an increase of 330 per cent, and in only one of these was there a positive test for acetone or diacetic acid.

From these findings it would seem to me (1) that there is a distinct association between highly acid urine and autointoxication due to putrefaction of the intestinal contents shown by the relation between indicanuria and high acidity; (2) that in diabetes an excess of acid (not necessarily diacetic or oxybutric) is the rule, and in addition (3) that this condition of high acidity is very frequently associated with albumin and casts in the urine.

It must be evident that an excessively acid urine must be more or less irritating to the kidney cells and tubules secreting it, and it is not unreasonable to suppose that such urine is a distinct factor in the production of casts in the urine, predisposing to serious and definite kidney lesions. From these findings I am constrained to believe that a definite diagnosis of Bright's disease should never be absolutely made until the urinary findings aside from albumin and casts are normal. (Since compiling this results my attention has been called to an interesting article (4) from which I quote: "The occurrence of albumin in the urine, alone or associated with casts, is not the absolute indication of a nephritis, once believed, as we know that its presence does not necessarily indicate an inflammatory lesion of the kidney. The subject of faulty metabolism as a cause of albuminuria is one which is attracting more and more attention, and deservedly so; for there seems but little doubt that this is the direction in which we must look for the etiological factors of at least one type of nephritis, the interstitial form.")

This brings me to an important point. It is quite possible that, to a greater or less extent, the conditions found in the kidney known as chronic Bright's disease, or interstitial nephritis, are in a measure due to those conditions which produce indican in the urine and high urinary acidity, and consequently the regulation of these conditions, the elimination of indican from the urine and the reduction of acidity to normal should be distinctly valuable prophylactic measures.

Another point of interest is that in the majority of cases, probably from 60 to 75 per cent, where the urinary acidity is excessive and indican is present, the urea elimination is invariably below the normal. From the findings in my 250 examinations the urea elimination was reduced to an

average of 60 per cent of the normal (taking 30 gm. as the normal daily output) in as many as 81 per cent of the whole series. Dr. Foxhall, in a very interesting paper in the London Lancet (5) has said that if the average urea excretion is below 1.4 per cent for 10 or 15 days it nearly always indicates definite renal damage. And so from this it would seem that conditions under discussion—high urinary acidity and indicanuria, and the low urea-index—are very closely related, and have a definite effect, the one upon the other.

Right here I wish to emphasize the fact that the quantitative estimation of the normal substances excreted by the body through the urinary channel gives definite information as to the actual metabolic activities of the body, which information should be of great value in the examination of the majority of those individuals consulting the physician; while even the most careful examination of a complete 24-hour collection for abnormal elements only assists in the diagnosis if certain definite disturbances are present, the frequency of which is not to be compared with the abnormal metabolic states which are unfortunately so very common.

No one finding in the urine examination is of infallible diagnostic proof, as has already been stated regarding casts and albumin. Those laboratory facts which tell us of the exact status of the body functions are especially valuable when one is dealing with chronic conditions which do not prevent the patient from continuing his usual vocation. This general idea of the extent of the metabolic functions of the body is unfortunately very seldom known in the routine work of the average man. The test for albumin and perhaps sugar, in addition to the estimation of the specific gravity, is about all the "urine examination" usually done, and very rarely is a twenty-four-hour collection demanded. Rather than forestall possible difficulties he advises a complete urinalysis only in extremis, and even then not too frequently.

In this connection it might be well to quote from an excellent article by Dr. Cruise in the Lancet. In this article he says: "Every cautious physician examines the urine for albumin in all serious cases of ill health, and not infrequently comforts himself and his patients when he finds that this substance is absent. I doubt that I am in error in adding, on the other hand, that very few practitioners attempt the quantitative estimation of urea in such cases. Nevertheless the importance of urematery is far greater than testing for albumin alone, because while the latter is often present, and signifies little, and may be absent in very grave cases, the quantity of urea is a matter of serious and often vital consequence."

And to this must be added that the estimation of the acidity will very quickly give an idea as to the general metabolic conditions of the patient, for, as has already been shown, this is nearly always associated with diminished urea.

Regarding the collection of the specimen of urine several matters of importance require consideration. In order to get correct results it is necessary for a whole 24-hour specimen to be collected, care being taken to instruct the patient as to the proper method of doing this. During the collection the vessel should be kept in a cold place, and preferably five or ten drops of chloroform placed in the vessel to preserve the urine from fermentation. The test is then made as soon as possible after the receipt of the specimen at the laboratory.

Of course some specimens will be alkaline in reaction, and in a majority of cases this will be found to be due either to retention of the urine, cystitis, or fermentation during the collection and transit of the specimen. The microscopic examination usually confirms this by showing the presence of either pus cells and various forms of epithelial cells, or crystals of ammonio-magnesium phosphate, or both. If the above methods are carried out, practically no error will be caused from the lack of proper preservation of the specimen.

So far nothing has been said regarding the method of estimating the urinary acidity. As yet no one method is scientifically accurate, for since the acidity of the urine is not due to any one acid or acid salt, the selection of a suitable indicator is a matter of considerable importance. Different indicators vary greatly in the degree to which they are affected. Methyl orange, congo-red, etc., are more sensitive to the OH-ions of the alkalines, while phenolphthalein, rosolic acid, etc., are more sensitive to the H-ions of the acids. Litmus in its affinities occupies a place somewhere between these two groups.

As has been stated before, the urinary acidity is due chiefly to the salt with the formula NaH_2Po_4, which reacts acid to phenolphthalein, the neutral point with this indicator not being reached until enough sodium hydrate solution has been added to convert this salt to that with the formula Na_2HPO_4. As a matter of fact, disodium-hydrogen phosphate, owing to disassociation into NaH_2PO_4 and NaOH,

reads faintly alkaline to the phenolphthalein. It has been found that this can be diminished by the addition of a saturated solution of NaCl which is neutral in reaction and consequently cannot itself affect the reaction. That the addition of salt solution is of value can be proved by titrating to the point where the pink color just appears, and then adding the salt solution, when it will disappear.

Salts with the formula Na_2HPO_4 also exist in the urine, and these react alkaline to methyl-orange and congo-red while those of the formula NaH_2PO_2 are neutral to the same indicator. Consequently urine containing the above salts and which shows an acid reaction to phenolphthalein, when titrated with methyl orange as an indicator, will display an alkaline reaction, which is not destroyed until enough hydrochloric acid solution has been added to convert the salts of the formula Na_2HPO_4 into those of the formula NaH_2PO_4. Any carbonate present must also be decomposed by the hydrochloric acid before the pinkish tinge indicative of the neutral point is reached.

Litmus, which in the presence of the above-mentioned salts gives an amphoteric reaction, is absolutely useless in the titration of urine. A urine which shows a marked degree of acidity when titrated with phenolphthalein as indicator is often strongly alkaline to red litmus paper. Dr. Benedict in his article (1), has well said: "The simplest way to deal with litmus is to discontinue it altogether, at least for such purposes as the present. All things considered, the best indicator for determining acidity not due to pure acids, is phenolphthalein, which, on the whole, places the neutral point about where it should be according to our general conception of acidity and alkalinity."

The most satisfactory method of ascertaining the urinary acid-index is by titrating a definite quantity with an alkali solution of known strength, using phenolphthalein as an indicator. The technique is as follows:

With a pipette or other measuring instrument measure out 10 c.c. of urine and add 2 or 3 drops of the indicator. To this add, drop by drop, from a burette, a decinormal sodium hydrate solution until a faint pink color is just obtained. (To those having no burette the use of the acidimeter is recommended. (7) The amount of solution required to give this reaction is read off and multiplied by ten, to reduce the figures to terms of 100 Cc. This is the acidity in degrees or per cent. This figure multiplied by the number of cubic centimeters of urine passed in 24 hours gives the number of acid units passed.

There are other methods of estimating the acidity—involving other principles. Some add an excess of potassium oxalate crystals to the urine before titration, believing that this makes the results more accurate, by ruling out error from the presence of ammonium salts. Others have various ways of expressing the acidity; some use terms of phosphoric acid, others terms of oxalic acid, and again others terms of hydrochloric acid. These methods all make considerably more figuring, and they also necessitate the use of an empirical alkali solution which is standardized to equal a certain number of milligrams of phosphoric acid, etc.

The above method gives us a very good idea of the acid elimination, and enables one to obtain therapeutic information which is of value.

It must be remembered that the usual examinations made in quantitative urine analyses for medical purposes are all very crude when viewed from the strictly scientific standpoint. The hypobromite method, which is probably the best method for the clinical estimation of urea, gives 6 to 8 per cent error. The estimation of the specific gravity is rarely corrected to temperature, and consequently varies quite a little from the actual specific gravity of the specimen; and the urinary acidity is probably from 5 per cent to 10 per cent away from the true figure if an ideal method could be devised for its estimation. But when the results are compared with the average of a large number of similarly obtained figures from normal individuals or with the estimations previously made on the same patient, it will be seen that approximate figures are distinctly valuable because they give comparative information that is just what is needed in the practice of medicine. It is (quite) possible that it is because of the difficulties associated with the accurate estimation of urinary acidity that the matter has remained so much in the back ground.

The physician will not, of course, be as interested in the scientific side of this paper as in the help that it may afford him in obtaining results, and so a few words regarding the principles of treatment which seem to be indicated in those conditions presenting high urinary acidity and the associated conditions may not be amiss.

It must be understood that the acidity of the urine varies in direct proportion with the alkalinity of the blood, and that in turn

depends upon the general health and vital powers of the body. The normal blood-plasma is alkaline in reaction, due to the fact that it carries in solution certain alkaline salts, especially disodium phosphate, Na_2HPO_4, and sodium carbonate. Upon this reaction depends to a greater or less extent, the ability of the blood to absorb carbonic acid gas, and thus to carry on the good work of elimination by means of the lungs.

When the normal alkalinity of the blood is diminished and there is an excess of acid substances in the blood, an acid intoxication results which is called by some acidosis and by others acidemia. Both terms are correct, but since the word acidosis is almost invariably associated with serious organic lesions, such as are present with diabetes mellitus, after chloroform anesthesia, and in other serious toxic states, I believe that the term acidemia is more appropriate for the condition which is under discussion at present (8). It is probable that the blood never becomes acid, as in such cases—death would undoubtedly result, since the capacity of the blood for carrying excrementitious substances from the cells to the eliminative organs would be absolutely nil and thus a general paralysis of elimination would occur.

One function of the kidneys is to eliminate from the blood all excess of acid substances, and they are so constructed that they are able, not to filter, but to secrete from an alkaline blood-plasma an acid urine. Now, if the amount of acid substances formed in the body metabolism is excessive, the kidneys frequently can no longer accomplish the work required of them, when the condition termed acidemia results. These harmful substances are carried around in the blood stream, neutralizing to a greater extent the alkalines of the blood and thus diminishing its power to carry carbonic acid gas, hence making a bad condition worse.

It must be evident, therefore that a diminished degree of the alkalinity of the blood-plasma, evidenced by increased urinary acidity, should be a danger-signal of extreme value to the practitioner, as it is positive that an excess of acid products of metabolism in the blood is most harmful, and it should therefore be the duty of physicians treating such cases to attend carefully to the modification of these particular conditions in additions to changing the causes of the abnormal metabolic functions.

For some time French investigators have been treating such diseases on the assumption that the reaction of the urine is a definite index to the state of the blood, and with excellent results. Their method of estimating the acidity is by Boussingault's titration method, using instead of sodium hydroxide a standard solution of calcium sucrate.(?) Boussingault does not claim that his method estimates the exact quantity of acid present in the urine, but that it represents the physiological acidity—the acidity which is of interest to the medical man.

In those conditions which have as one of their manifestations high urinary acidity it has been conclusively demonstrated that the judicious use of alkaline remedies is of distinct value.

My friend, Dr. Eugene S. Talbot of Chicago, has done much original work along this line and has accomplished excellent results in the treatment of pyorrhea alveolaris (9) and other serious mouth conditions by simply cleaning the mouth thoroughly and neutralizing the general systemic hyperacidity with the suitable alkaline remedies, such as sodium bicarbonate, magnesia, etc. Twenty to forty grains of sodium bicarbonate dissolved in water, with or without other synergistic remedies, is administered about one hour before meals and at bed time. This very soon reduces the excessive acidity to normal.

That this treatment is of value is evidenced by the resulting influence on the unpleasant conditions which are so commonly associated with the high acid-index. The mental dulness, many aches and pains, irritability and general restlessness, dyspepsia and biliousness, together with the lowered vital resistance evidenced by frequent colds, etc., is modified, the patient begins to mend immediately, and the change is both favorable and marked. The alkalies should be given judiciously, and for not longer than a few days, and a careful watch over the urinary acidity made from day to day. This procedure, associated with the removal of the principal causative factors—intestinal putrefaction, constipation, indigestion, excessive feeding, the sedentary life in general—soon brings the patient to a more normal condition.

Right here I can do no better than to quote from a very able article by Dr. Eustace Smith in the British Medical Journal (10) as follows: "Alkalies when absorbed into the circulation increase the alkalinity of the blood, modify secretion, and if continued too long, may become a fruitful source of anemia and languor. Carried out through the kidneys, alkalies

reduce or annul the acidity of the urine, and are at first beneficial, but in a moderate dose or in too protracted a course may cause cystitis or even vesical hemorrhage. The effect of alkalies is not alone limited to the local action on the stomach, for when used with judgment they seem to have the power of influencing the whole system for good and setting up a very favorable change, which is not always a merely transitory improvement. We often have occasion to notice the prolonged benefit which follows a course of alkaline waters at one of the many spas both at home and abroad. Acting in this manner the salts of the alkalies are not so much antacid as alterative drugs, which, given in moderate doses for a period of weeks and months, are able without producing any immediate or striking change to correct a morbid condition of an organ or of the whole system and set up an improvement which if not permanent is slow to pass away. In addition to their value in derangements of digestion, alkalies are of special service in the treatment of urinary acidity and the discharge of sand and gravel."

Careful investigation will prove that in the majority of chronic diseases, and specially in those diseases which are so very common, such as tuberculosis, rheumatism, neurasthenia, etc., together with the hundred and one other conditions associated with autointoxication, will usually show a decidedly high degree of acidity, and also a marked increase in the number of acid-units eliminated per diem. When the conditions causing this are modified and the findings in the urine changed, the chances of the patient for recovery are greatly increased, because the body and its cells do not have the extra work of getting rid of these poisons, and hence can better attend to the work of overcoming the ravages of the tubercles bacillus and of building up the body-structure in general.

The study of the urinary acidity and its relation to disease is yet in its infancy, and it is to be hoped that in the future more time and effort may be expended on the investigation of this important subject. My sincere wish is that this paper may serve to arouse greater interest in this important matter. In closing I will say that the time spent in making the quantitive acidity test as a routine will be more than repaid to the general practitioner in the indications for treatment he will receive from this information and the more satisfactory results derived from the better adjusted treatment.

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Suite 905, Chicago Savings Bank Building.

Changes in University Faculty. — The board of directors of the University of Missouri, Columba, have appointed Dr. C. M. Jackson, junior dean, as dean to succeed Dr. Andrew W. McAlester, resigned. Drs. Max Meyer, William J. Calvert, George LeFever, and Woodson Moss have resigned from the faculty. The board also appointed a committee to take up the matter of locating the work of the junior and senior years in St. Louis.

Independence Day Accidents.—With returns in from all parts of the United States on Fourth of July casualties, this year's two-day celebration of Independence has a record of 47 persons killed and 2423 injured. The number of deaths was smaller than in 1908, when 56 were killed, but the number of reported injuries was much larger, last year's list of injuries having numbered 1899. The 48-hour duration of this year's "Fourth" is held to account for the increased number of burned fingers and singed faces. The smaller number of fatalities, it is held, show that the "safe and sane" celebration movement has had some result.

Beer Blamed for Mosquitoes.—The prohibitionists in an Arizona town are reinforcing their propanganda upon a rather unusual basis; the mosquitoes therein are fiercer than ever, and for this the beer drinkers are blamed. This town gets its supply from points sometimes as far away as Houston, Texas. When the cold storage cars stand open for any length of time near the Texan marshes swarms of mosquitoes are tempted to hide in their dark corners. When the car is filled and sealed these insects are prisoners and transferred to the desert mining camps where the heat livens them up prodigiously. The mosquito is said to have been unknown in Arizona a few years ago; and beer importations are in some measure at least held responsible for the present-day appearance.

SURGICAL EPONYMS.*

MARTIN HAGEN, M. D.

CHICAGO, ILL.

Baker, William Morrant (1839-1896), English; surgeon, London. Operations: 1. Excision of the tongue by the ecraseur. 2. Method of excision of the knee-joint. 3. Method of trachelectomy.

Ballingall, Sir George (1780-1855), Scotch; surgeon, Edinburg. Operation, excision of the superior maxilla.

Bardeleben, Heinrich Adolf (1819-1895), German; surgeon, Berlin. Operation, for double complete harelip with protruding os incisioum.

Bardenheuer, Bernhard (1839-), German; surgeon, Cologne. Operations: 1. Cholecystotomy. 2. Splenopexy. 3. Extraperitoneal exploratory incision. 4. Resection of the sacrum. 5. Suprapubic cystotomy.

Barker, Arthur Edward James (1850-), Irish; surgeon, London. Operations: 1. Excision of the hip joint. 2. Excision of the astragalur. 3. Subcuataneous suture of a fractured patilla. 4. Inguinal herniotomy. 5. Gastro-enterostomy. 6. For spinal abscess. 7. For ununited fracture of the clavicle. 8. Varicocelectomy. 9. Femoral herniotomy.

Bartisch, George (1535-1607), German; ophthalmologist, Königsberg. Operations: 1. For entropion. 2. For ptosis.

Barton, John Rhea (1794-1871), American; surgeon, Philadelphia. Operations: 1. Lenear osteotomy for ankylosis. 2. Method of uniting fractured patilla.

Bassini, Edoardo (1847-), Italian; surgeon, Padua. Operations: 1. For inguinal hernia. 2. For crural hernia.

Battey, Robert (1828-1895), American; gynecologist, Atlanta. Operation, normal ovariectomy.

Baudens, Jean Bapt. Lucien (1804-1857), French; army surgeon. Operations: 1. Amputation at the tarso-metatarsal joint. 2. Amputation at the knee-joint. 3. Excision of the upper end of humerus through an oblique incision.

Baulot, Jaques [also known as Frere Jaques] (1651-1714), French; surgeon, Paris. Operation, lateral lithotomy.

Baum, William George (1836-1896), German; surgeon, Danzig. Operation, stretching of the facial nerve.

Beclard, Pierre Augustin (1785-1825), French; surgeon, Paris. Operations: 1. Method of amputation at the hip-joint. 2. Method of wound suture.

Beer, Georg (1763-1821), German; ophthalmologist, Wien. Operations: 1. A flap method for cataract. 2 Iridectomy. 3. For iridodialysis.

Bell, Charles (1774-1842), Scotch; surgeon, Edinburg. Operations: 1. Method of wound suture. 2. Ligation of the first part of the lingual artery. 3. Method of shoulder amputation. 4. Gastrostomy.

Bell, John (1762-1820), Scotch; surgeon, Edinburg. Operations: 1. Ligation of the gluteal artery. 2. Method of enterorrhaphy.

Bèrard, Jr., Auguste (1802-1846), French; surgeon, Paris. Operations: 1. For nasopharyngeal tumor. 2. Herniotomy by the "golden puncture" method.

VonBergman, Ernst (1836-1907), German; surgeon, Berlin. Operations; 1. For hydrocele. 2. For mastoiditis and otitis media. 3. Nephrectomy.

Berlin, Rudolf (1833 1897), German; ophthalmologist, Rostock. Operations: 1. For entropion. 2. Excision of the lacrymal sac.

Berlinghiere, Andreas Vacca (1772-1826), French; surgeon, Paris. Operations: 1. For entropion. 2 For trichiasis.

Bernay, George J (1824-1888), German; (emigrated 1852), obstetrician, St. Louis. Operations: 1. "Ideal operation" for cholecystotomy. 2. Treatment of gastric cancer by curettement.

Bier, August Karl Gustav (1861-), German; surgeon, Wein. Operations: 1. Method of treating pseudoarthrosis and retarded callus formation. 2. Method of treating joint-tuberculosis. 3. Amputation by osteoplastic method. 4. Treating surgical diseases by venous engorgement. 5. Operations performed under cocain spinal anesthesia.

Bigelow, Henry J. (1816-1890), American; surgeon, Boston. Operations: 1. Excision of the hip joint (first in America). 2. Lithotapaxy, or rapid lithotrity. 3. Method of treating hip-joint disease.

Bilguer, Johann Ulrich (1720-1796), German; surgeon, Berlin. Operation, resection of the wrist.

Billroth, Christian Albert Theodor (1829-1894), German; surgeon, Vienna. Operations: 1. Pylorectomy by "first method." 2. Pylorectomy by "second method." 3. Unilateral excision of the larynx. 4. Excision of the tongue through an inframaxillary incision. 5. Excision of the tongue with bilateral division of the lower jaw. 6. Excision of the second division of the fifth nerve. 7. Method of tenorrhaphy. 8. For ectopia vesicae. 9. Enterorrhaphy by lateral implantation. 10. Blepharoplasty. 11. Linear osteotomy for genu valgum. 12. Method of varicotomy.

Bird, Golding (1815-1854), English; sur-

*Additions and corrections will be gratefully received.

geon, London. Operations: 1. Jeunostomy. 2. Excision of the knee-joint. 3. Osteotomy for pes planus.

Blandin, Philippe Frederic (1798-1849), French; surgeon, Paris. Operations: 1. Amputation at the hip-joint by the lateral flap. 2. Excision of the whole of the inferior maxilla. 3. For deviated nasal septum. 4. For double harelip. 5. Excision of the superior maxilla. 6. For symblepharon. 7. Complete excision of the superior maxilla.

Blasius, Ernst (1802 1875), German; surgeon, Halle. Operations: 1. Blepharoplasty. 2. Cheiloplasty. 3. Uranoplasty.

Bobbs, John S. (1809-1870), American; surgeon, Indianapolis. Operation, cholecystostomy.

Bond, Thomas (1712 1784), American; surgeon, Philadelphia. Operation, for pes planus.

Bonnett, Amèdée (1802-1858), French; surgeon, London. Operations: 1. Enucleation of the eye. 2. Inguinal herniotomy.

Borelli, Giambattista (1813-1891), Italian; surgeon, Turin. Operation, for staphyloma.

Bouisson, Elienne Frederic (1813 1884), French; surgeon, Montpelier. Operations: 1. Rhinoplasty. 2. Method of enterorrhaphy.

Bowman, Sir William (1816-1892), English; ophthalmologist, London. Operations: 1. For keratoconus. 2. Discision of the cornea. 3. For fistula of the lacrymal gland. 4. Excision of the pupil. 5. For ectropion. 6. Iridodesis. 7. For ptosis. 8. For lacrymal obstruction.

Boyer, Alexis (1757-1833), French; surgeon, Paris. Operation, excision of the tongue.

Brasdor, Pierre (1721-1798), French; surgeon, Paris. Operation, distal ligation in aneurysm.

Briggs, William Thompson (1828 1894), American; surgeon, Nashville, Tenn. Operations: 1. Varicocelectomy. 2. For traumatic epilepsy.

Broca, Paul (1824-1880) French; surgeon, Paris. Operation, evacuation of appendiceal abscess through the rectum.

Bowditch, Henry Ingersoll (1808 1892), American; physician, Boston. Operation, pericentesis thorasic.

Brown, Isaac Baker (1812-1873), English; gynecologist, London. Operation, for nymphomania.

Buck, Gurdon (1807-1877), American; surgeon, New York. Operations: 1. For fractured thigh. 2. Excision of the olecranon process. 3. Repair of defect of ali nasi. 4. For contracted lower lip. 5. For deformity of upper lip. 6. For loss of entire upper lip. 7. Restoration of angle of mouth. 8 Excision of knee-joint. 8. Osteotomy for genu valgum.

Bumstead, Freeman Josiah (1826-1879), American; surgeon, New York. Operations: 1. Method of circumcision. 2. Internal urithrotomy.

Burrow, Karl August (1809-1874), German; surgeon, Königsberg. Operations. 1. Plastic closure of triangular defects. 2. Cheiloplasty. 3. For entropion.

Butcher, Richard George Herbert (1819-1891), Irish; surgeon, Dublin. Operations: 1. For dentigerous cyst. 2. For double harelip.

Buzzi, Francesco (1751-1805), Italian; ophthalmologist, Mailand. Operation, formation of an artificial pupil.

Byrd, William Andrew (1843-1887), American; surgeon, Quincy, Ill. Operations: 1. For imperforate anus. 2. Closure of an artificial anus.

(To be continued.)

Subscribe for the MEDICAL FORTNIGHTLY.

BURNING THE CANDLE AT BOTH ENDS.—How frequently we hear the remark made when one we have known has been suddenly stricken down by illness. "Yes, he has been burning the candle at both ends," and yet how difficult it is for many in this age of high pressure to avoid so doing Nowadays, the work a day world is a most exacting one, and moves very rapidly, and to keep pace with the times we must labor on and on, and incessant toil sometimes crowds out the thought of rest. This, however, can have but one result, and thus it is that infirmaries, lunatic asylums, and hospitals for nervous diseases have so long a roll of patients and have such a sad tale to tell of overworked brains and nerves and muscles. Rest is absolutely essential, and there are very few, no matter how physically strong they imagine they may be, who can with impunity work day and night too for any length of time without finding that the strain sooner or later tells upon them. Day was made for work and night for sleep, but there are, of course, those who must be awake by night because their labors are needed, or because duty calls them; but with the mass of mankind the day is for work and the night should be exclusively devoted to rest. For those who are obliged to labor for long hours it is infinitely better when practicable to commence work early in the morning than to extend it into the night. With most people, the time they allow themselves for rest is not sufficiently long to recuperate them or to enable them to rise sufficiently refreshed to commence their daily work.—Health.

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EDITORIAL

The Emmanuel Movement.

So much has been said about the Emmanuel movement that we have felt that it was getting abundant publicity, even though we devoted no great space to it, being neither fish nor flesh it seems to be going the way of its kind. It is simply impossible for an unspiritual man to impart spiritual qualities to others. While it is possible for a person who is filled with faith, hope and commonsense to do a work of great benefit in the presence of various forms of disease and imagined disease it is not this class of people who have undertaken the work in sections distant from Boston. It seems to have especially appealed to that section of the clergy which delights itself in publicity in the middle West, and granting a co-operation between such workers and the medical profession it would seem that the patient would be better off were he left to his physician without interference from others. Those in authority in this movement are realizing its deficiences and have taken steps to check the reactionary tide. The editor of the Post-Graduate, in a recent issue, states that the "Emmanuel clergy, evidently realizing the justice of the criticisms made recently against the Emmanuel movement, have now adopted a new set of rules, on the suggestion, it is said, of an advisory board of prominent Boston physicians. The new regulations state that no patient shall be received for treatment unless with the approval of, and after having been thoroughly examined by, his family physician,' and that 'all patients who are not under the care of a physician must choose one, and put themselves in his care before they can receive instruction at Emmanuel Church.'" And he comments: "Such rules as the above would seem to indicate the beginning of the end of this movement, and the return of the patient to the doctor. We are glad to see the initiative coming from Boston, whence so many other fads have started. We confess also to having long been puzzled as to why and by what right ministers practice medicine. We had thought that certain years of prescribed work — certain examinations, etc. — were necessary before anyone could legally practice the profession of medicine. Even osteopaths and optometrists have to undergo State examinations."

Appendicitis No Longer "The American Disease."

Some interesting statistics have lately been published in Germany relative to the mortality of appendicitis, aside from the interesting comparison of mortality of surgical and therapeutically treated appendicitis, we gather from this report the fact that this has ceased to be so distinctly an American disease as it was formerly considered. It is now recognized as endemic in Berlin. The Berlin Medical Society, through an appointed commission, recently investigated the disease in that city and the following is gathered from the report of the commission:* "It was found that 6,061 cases had been recorded in Berlin in 1907. Of these 54.8 per cent were males and 45.2 per cent females. The frequency of the disease at different ages was as follows: Up to the tenth year, 9.3 per cent; from the tenth to the twentieth year, 34 per cent; from the twentieth to the thirtieth year, 29.6 per cent. The chronic form reached its acme between the twentieth and thirtieth year. Previous infectious diseases were rarely recorded and trauma only in three instances, so that the vast majority of cases were of enterogenic nature.

"Professor Rotter, who had charge of the therapeutic end of this investigation, collected 2,705 cases of acute appendicitis, of which 2,365 were treated in hospitals and only 340 in private practice, with a mortality of 9 per cent in the former and 1.7 per cent in the latter. These figures are of no special significance in view of the small number of cases treated outside of hospitals. The mortality in 1,344 cases operated on in hospitals was 14.6 per cent, which appears to be excessive from an American standpoint. The observation commonly made that the earlier the operation the less the mortality is also confirmed by these statistics, since in cases operated

*International Journal of Surgery, July, 1909.

on the first day it was 0.9 per cent, the second day 7 per cent, and the third day 10 per cent. The total death rate in late operations (after the third day) was 18.8 per cent. In 1,021 cases in which operation was avoided either because it was deemed unnecessary or because it no longer offered prospect of success, death occurred in 1.6 per cent. The mortality was materially influenced by the age; thus up to the tenth year it was 17.4 per cent, from the tenth to the twentieth year 5.3 per cent, from the twentieth to the thirtieth year 10 per cent, from the thirtieth to the fiftieth year 21 per cent, and from the fiftieth to the seventieth year 80 per cent."

It is interesting to note that the mortality from non-surgical treatment is considerably lower than that from surgical treatment; the explanation is easy for we all know that surgery is resorted to as a last resort all too often, and that cases which might have lessened the surgical percentage of mortality had they been brought to the surgeon at the onset are brought to him after medical expedients have been exhausted and the patient in a condition where his recovery is past hope. Such deaths should be attributed to the medical account. Another explanation is that surgery speaks for certainty in diagnosis, while many confusing conditions may have entered in the list where there was no operative intervention.

As to the House Fly.

Since the appearance of "The House Fly at the Bar," emanating from the Merchants' Association of New York, early in the season, the discussion of the evil influence of that most annoying of household pests has seemed to indicate that he, along with other pests, is ultimately to be eliminated. Unfortunately for the cause, the city and the state have much to be responsible for in the matter of his numbers in cities, in lesser communities they may have a like responsibility. Our alleys, over which the city maintains supervision, are theoretically one of the fine things of which St. Louis can boast, but the scheme of collection of garbage and stable refuse is so far from ideal in most sections of the city, that garbage is regarded as a menace to health. Before collection garbage is allowed to accumulate and rot in leaky baskets, boxes and buckets, uncovered and at the command of flies and the rats which infest the alleys; the collection is made in wagons only a little less leaky and unsanitary than the receptacles in which it has accumulated. The scheme of ash pits is most inviting to the uninformed whose overflowing garbage receptacle will contain no more; these pits call for rigid examination, and they should be done away with if they cannot be made sanitary. But it has been proven that it is not the odors and the filth which endanger health, objectionable though they are, but the carriers, the flies, rats, etc., which breed and multiply therein, walk and feed thereon, and carry filth and disease into homes and eating places from which they are not excluded. The fly problem seems to be one which is up to the municipality, It is all very well to order the abolition of accumulations of waste on streets, in alleys and private grounds; an order and seeing an order enforced are two very different things. Since its experience with the plague San Francisco has shown what is possible in the way of enforcement of sanitary measures; the order and its enforcement were indeed two very different things.

When municipalities shall have endeavored to enforce cleanliness and an immediate removal or destruction of filth, will also be their duty to see that their employees, even to the driver of the garbage cart, are duly considerate of the rights and property of the public, whose servants they really are. An order for sanitary and ornamental garbage cans is all right; it should be emptied before it is over-full; the can should not be thrown into the alley to be ruined by the wagon which has received its contents, or to be the victim of the next passing vehicle.

The scheme of fly extermination, or rat extermination, or civic cleanliness is not so much a matter of the people as of the municipal governments themselves, when the municipalities have learned their obligation to keep cities clean and then to do it, rigidly and without exception, because of a desire to favor and without unwarranted destruction of property, many of the sanitary problems will cease to be problems and the new regime will be one of tremendous beneficence.

ST. LOUIS ITEMS.

Dr. Joseph L. Boehm has resigned the chair of Genitc-Urinary Surgery, which he has held for some years, in the St. Louis College of Physicians and Surgeons and severed his connection with that institution. We have not learned who is to be his successor.

Dr. A. C. F. Brown returned from his vacation on July 29th, bringing with him Mrs. Brown, who was until July 28th Miss Lelia Maude Kircher, of Nevada, Mo. Until the completion of their home on the South side, Dr. and Mrs. Brown are stopping with friends on Washintgon Avenue.

A change in control which promises to be a matter of considerable importance in local medico-educational matters was announced since our last issue, it affecting the Barnes Medical College. The new arrangement places the school and Centenary Hospital in affiliation with Baptist schools, and means the beginning of an era of greater usefulness and importance.

Rumor has it that there is to be a new school launched before the beginning of the fall session, but that it is to incorporate in itself one of the schools already in existence. As we have said before, anything which makes for better schools and better medical equipment on the part of coming practitioners should be welcomed by the profession. An absolutely new school would not seem to be particularly needed at this point just at this time.

Dr. Albert Abrams, of San Francisco, who is well known to Fortnightly readers, has under preparation for early publication a work on "Spinal Therapeutics." This will be the first of its kind ever written, and that it will be full of matter suitable for practical application every reader of the Fortnightly knows, for Dr. Abrams is essentially practical in all of his writings.

The Alumni of the medical department of Tulane University at St. Louis have effected permanent organization with a view of fraternal intercourse and the accommodation of those of their fellows who may attend the meetings of the Mississippi Valley and the American Medical Associations which are to be held here within the next year. The officers of the association are: Dr. H. J. Scherck, chairman, R. C. Atkinson, H. McC. Johnson and F. Finley.

The Proctologist.—The September number of The Proctologist will contain the papers (twenty-five with the discussions) read at the 1909 meeting of the American Proctologic Society. There will be more than 150 pages by the foremost proctologists. The Proctologist is constantly widening its sphere of influence; this is resulting in its being found among the journals of the general practitioner as well as the specialist.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Managing Editor, Century Building, St. Louis.

DISEASES OF THE SKIN. By A. H. Ohmann-Dumesnil, A. M., M. E., M. D., Ph. D., etc., formerly Professor of Dermatology and Syphilology in the St. Louis College of Physicians and Surgeons, etc. Third edition. Thoroughly revised and enlarged 140 original illustrations. St. Louis: C. V. Mosby Medical Book and Publishing Co. 1908.

This book is not a treatise, but a practical guide to the recognition of skin diseases met with every day by the general practitioner and the treatment of the same. The author has not attempted to write an elaborate work, but has furnished to the medical profession in a clear, concise and condensed manner, from the anatomy through all the forms, classes and kinds of the various dermatoses. This valuable book will be of vital assistance to the busy practitioner who wants the knowledge of skin diseases and wants it quickly without having to do much collateral reading.

VACCINE AND SERUM THERAPY. Including also a Study of Infections, Theories of Immunity, Opsonins and the Opsonic Index. By Edwin Henry Schner, B. S., M. D., Assistant Professor of Parasitology and Hygiene, University of Missouri, etc. Illustrated. St. Louis: C. V. Mosby Co., 1909. (Price $2.00.)

This book is an up-to-date and concise exposition of the subject of vaccine and serum therapy. Although a work of this nature necessarily entails many theoretical problems, the author successfully incorporates the theoretical and experimental evidence as well as the clinical application of specific treatment of bacterial disease. Much space is necessarily given to opsonins and the opsonic index, a subject once the lime-light of the profession but now fallen into disrepute by some. Perhaps this may be due, in part, to the imperfect technique and conflicting reports, but no doubt the exaggerated claims of precocious exploiters have also placed a misconception on the therapeutic value. Perhaps the opsonic subject today holds the same relation as tuberculin did years ago—to be discarded only to be revised again and found to be of great value. The chapter on serum therapy is an excellent portrayal of the subject in its highest stage of development. The practical matter contained in this section amply compensates the theoretical aspects of the volume in general.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, etc. By Leading Members of the Profession Throughout the World. Edited by W. T. Longcope, M. D. Vol. I, Nineteenth Series, 1909. Philadelphia and London: J. B. Lippincott.

This volume embodies many eminently practical and timely contributions together with a general literary resume of the progress in treatment, medicine and surgery. Under the caption treatment is an article by Lawrence Flick, "The Hospital for

Advanced Cases of Tuberculosis," and another on "Occupation and So-called Rheumatic Pains" by James Walsh. The latter in particular is strikingly suited for the general practitioner, as it embraces many practical suggestions. In the medical section are well written articles on "Mikulicz's Disease and Allied Conditions," by Campbell Howard; "Acute Tubercular Rheumatism," by Prof. A. Poncet and Dr. Lericke; "Diagnosis of Gastric Dilatation," by David Sommerville; and "Typhobacillosis," by L. Landouzy. Surgery is represented by Leonard Freeman who writes on "Nerve Grafting in Facial Paralysis;" Edred Corner, on "Suppuration in Appendicitis"; F. A. Richardson, on "Excision of the Hip-joint in Arthritis Deformans," and David Willmoth on "Conditions Modifying Operative Work." Gynecology and obstetrics are respectively represented by Robert Jardine and Charles Cumston, their subjects being both interesting and instructive. Oliver Kelsall writes on "Rupture of the Urethra;" "Acute Urinary Retention," and "Secondary Syphilis." On the subjects of proctology, rhinology, dermatology and pathology appear articles respectively written by Samuel Earle, Charles Grayson, Drs. Duval and Vinard, and W. G. MacCollum. The feature of the volume, however, is the annual review of the advances made in treatment, medicine and surgery during the year 1908. The mere fact that Stevens, Edsall and Bloodgood are identified in connection with this department amply insures its high standard.

HUMAN PHYSIOLOGY. An elementary text-book of anatomy and physiology. By John W. Ritchie, Professor of Biology, College of William and Mary, Virginia. Cloth, 362 pages. Yonkers-on-Hudson, New York: World Book Co. (Mailing price, 96 cents.)

We have seen many text-books on physiology intended for the use of children of the public and other schools, and it is a pleasing surprise to find one which is an exception to the rule, in that it is scientific and not filled with matter absolutely unpractical. This little volume reads interestingly from cover to cover, and every word has a definite purpose. It is to be hoped that it will attract the attention of physicians who are in a position to have influence in the adoption of school texts.

GONORRHEA IN WOMEN. By Palmer Findley, M. D., Professor of Gynecology in the College of Medicine of the University of Nebraska. Pages 106. Royal Octavo. St. Louis: C. V. Mosby Medical Book and Publishing Co., 1908. (Price $2.00.)

This volume occupies an important place in the literature on gynecology in that it deals with the subject more at length than is allowed it in the regular texts and in a manner representing its importance among diseases of women. That the works on gynecology give but scant space to this subject is well known, and if this volume awakens the profession to a realization to the supreme importance of the subject of gonorrhea in women and instructs us to make effective warfare against it it will have served a purpose of tremendous usefulness. The character of the text and Professor Findley's happy method of expressing himself make the book of distinctly practical value. The chapters devoted to treatment are especially strong and full of points which will be found of daily use if adopted in practice.

PRACTICAL RADIUM. A practical discussion of the uses of radium in the obstinate forms of disease. By Heber Robarts, M. D., Founder and Editor of the American X-Ray Journal, etc. Illustrated. St. Louis, Mo.: Published by the Author.

The accidents which may result from an unintelligent use of the X-ray and radium in their therapeutic employment have been so emphasized in the mind of the profession that there has been an abandonment of these useful agents on the part of many who should be using them effectively. That both are invaluable and that each may be employed with safety and certainty where indicated is being demonstrated and faith is being restored. Dr. Robarts is easily one of the best informed of American advocates of this form of treatment and in this volume he gives the profession the result of long study and abundant clinical experience with radium and radioactive substances; the book makes radium a knowable quantity, and will make its intelligent use possible. We believe it a book which should be in every working library.

TUBERCULOSIS. A Preventable and Curable Disease. Modern methods for the solution of the tuberculosis problem. By S. Adolphus Knopf, M. D., Professor of Phthisio-therapy, New York Post-Graduate Medical School and Hospital, etc. Illustrated. Cloth, 8vo. New York: Moffatt, Yard & Co. (Price $2.00, net; mailed $2.20.)

This book is announced as a book for the patient and those living with him, for the physician and sanitarian, for the statesman and legislator, for educators and teachers, for rich and poor willing to help in the crusade against tuberculosis, and it is all these. There is no phase of the tuberculosis problem which has not been given thoughtful attention, and the resulting volume is one of the most practical ever published on this very important subject. Coming from the pen of Dr. Knopf is sufficient guarantee to the medical profession that the book is one of worth; this insures it a wide reading in the medical profession. Only a reading will convince physicians what a tremendous role it can play when passed on to those outside our profession

who must aid us in this warfare. Dr. Knopf has done this class of sufferers many services, but none of those of earlier date will have been more tellingly effective for the betterment of conditions than will the publication of this very complete and very practical volume which is so distinctly needed at just this time.

The August Century will be the Midsummer Holiday Fiction Number, with the third and last of the anonymously published "Thirteen at Table" stories, by one of these three authors, Margaret Deland, Dr. S. Weir Mitchell, and Owen Wister; other tales by Katharine Metcalf Roof, Cleveland Moffett, David Gray, Caspar Day, and L. Frank Tooker; and the first of Albert Hickman's "The A Flat Major Polonaise," the extraordinary story of a musician of exuberant temperament and his experiences in a Nova Scotia camp. Mr. Hickman rich humor has already been shown in his shorter stories in The Century, "Overproof," "Oriented," etc.

Physical Culture's Strong August Issue.—An aspect of America's national game not frequently discussed is dwelt upon in Physical Culture for August, under the caption "Baseball in the Making of Men." The author of this article contends that the universal indulgence in the game by the youth of America has much to do with the ability of Americans to physically withstand the strenuous life more successfully than the men of other lands. James J. Jefferies, the famous pugulist, and Annette Kellerman, the well-known Australian swimmer, each contribute strong endorsements of the sport exemplified by each as an aid to physical culture. The value of systematic exercise in youth is discussed in an article entitled "Physical Culture among the Children of the World." Other contributions in this interesting number are the "Value of Fruit as a Food," "The Salt Habit," "Facts About Walking", "Breads to Eat for Strength," "The Cause and Cure of Wrinkles," and many others. In addition to the many illustrations and descriptions of exercises contained in the magazine, the handsome monthly supplement illustrates an instructive article by the editor, Bernarr Macfadden, entitled "Developing a Powerful Physique."

Admits Women.—The Royal College of Physicians and the Royal College of Surgeons of England, is said to have opened their doors to women and will confer their degrees upon them.

MEDICAL PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

OTOLOGY.

A. F. KOETTER, M. D.

A New Method of Treating Chronic Frontal Sinus Suppuration.—Citelli (Catania) (Zeitschrift fuer Laryngologie) proposes in opening frontal sinus, after removal of pus, scraping the mucous membrane, drying and disinfection, the cavity he filled with melted paraffin mixed with iodoform, thereby gaining a rapid healing without deformity. He treated the frontal sinus of two healthy dogs and in one dog artifically created suppuration, microscopical examination demonstrated that filling with paraffin caused no bad effects, that the side wall proliferation with tendency to connective tissue formation appeared and not destructive processes. Experiments on cadavers showed that it is possible to fill the frontal sinus completely with paraffin, but this method has never been tried on the living.

Contribution to the Knowledge of Scarlatinous Disease of the Mastoid Process and Accessory Sinuses of the Nose.—(Ruede-Zeitschrift fuer Ohrenheilkende.)—I. Nineteen cases of scarlet fever, otitis and mastoiditis—twelve in children 1-5 years of age; four from 6-10 years of age; three from 12-20 years; seven followed the early otitis and twelve after late otitis. In the larger half of the cases there existed a severe fibrinous naso. pharyngeal disease in the severe, and in part complicated cases, it was never absent. Bone fistula in ten cases, usually in the region of the mastoid fossa, here also was found a subperiosteal abscess. Signs of bone necrosis was found in seven cases, three times a peri sinous suppuration, once sinus thrombosis, three times there appeared fibrinous membrane in the antrum and the surrounding cells, in one case naso-pharyngeal affection parallel to an affection of a like character. In the bacteriological examination of pus streptococci were mainly found and demonstrated in part in the pure culture. One patient died the healing in the other cases was delayed two to three months on account of desquamation of the sequestrium. In three cases the radical operation was necessary on account of continued fetid secretion, in two cases cholesteatom formation occurred, observation of which led Liebermann to propose a primary radical operation in extensive acute necrosis of the walls of the middle ear cavity. One case led to complete bilateral deafness. II. Nine cases of suppuration of the accessory sinuses after scarlet fever, 0.8%, acces-

sory sinus complications. Age: six patients 1-5 years, two from 11-20 years. Accessory sinus complications appeared in the majority of the cases second to fifth week of the scarlet fever. In all nine cases there existed uni or bilateral ethmoidal sinus inflammation, in four besides this a uni or bilateral inflammation of the antrum of Highmore, and in only one case, also a bilateral frontal sinus inflammation. The combined empyemas, as regards the majority of the cases, ran a severe course, the pure ethmoidal inflammations were of a mild character, one of these cases developed a rhinitis sicca universalis, resulting from a scarlatinous fibrous rhinitis. That scarlet fever can lead to epithelium metaplasm in the nose was proven histologically in one case showing destruction of the mucous membrane epithelium on the middle and inferior turbinates of both nostrils and on the septum. Two cases which were accompanied by sequestration of pieces of bone, had to be opened extranasally and then healed. Four patients died not due to accessory sinus suppuration but on account of the septic character of the scarlet fever endocranial complications were absent, they are apparently much rarer than in scarlet fever mastoiditis. The anatomical substrata is in the acute stage a catarrhal mucous membrane inflammation, partly pus or fibrinous exudate. The bone participates with softening and necrosis in later stages, new formation of bone and connective tissue is shown. In one case extensive sequestrium formation in the region of the frontal sinus occurred. Diagnosis: An accessory sinus inflammation should be considered were, in the course of scarlet fever, continued profuse nasal secretion combined with edema of the eyelids, swelling in the region of the forehead or in the corner of the angle of the eye, or a swelling, as mentioned above, without nasal secretion. If the secretion is fetid, necrosis is probable. The antrum inflammation is diagnosed by puncture of the antrum of Highmore. For ethmoidal inflammation the inflammatory swelling toward the orbit is pathognomonic. The therapy of these scarlatinous accessory sinus affection is at first an expectant and symptomatic one. When the fetid character of the secretion and the local examination indicate necrosis and sequestrium formation, where the inflammation through rupture into the surrounding parts assumes a threatening character and where it has become chronic a thorough cleaning out, extranasally, of the sinuses is indicated.

No scalp wound is too small to receive the most scrupulous aseptic attentions.—W.

SURGERY.

C. W. HEPBURN, M. D.

Acute Post-operative Jaundice.—In Medical Record for March 13, 1909, Dr. Charles Greene Cumston writes that the existence of acute post-operative jaundice cannot be denied merely from the fact that few cases are encountered. Lindh has examined 15,052 narcoses and found only ten cases of post-operative jaundice. It occurred nine times out of 11,284 anesthesias with chloroform, in other words, 0.079 per cent., with ether-chloroform nacroses there was one instance out of 2,122 anesthesias, or 0.047 per cent.; in 1,297 ether narcoses none occurred; while out of 362 nacroses with ethyl bromide or ethyl bromide and chloroform, there were five cases. Out of 40,000 narcoses at the Kharkov Hospital, Grube did not observe a single instance. It appears that ether is far less toxic for the liver than chloroform, but that both manifest their toxic influence when the hepatic cell is in a pathological condition, such as arises from the use of alcohol or in lead poisoning. Besides the toxic action of anesthetics, absorption of large quantities of blood from extravasation or from operative or traumatic hematoma, reflex spasm of the biliary tract of peritoneal origin and emotional reflex have been thought to be causes of post-operative jaundice. The author in his conclusion says that it is probably due to several causes. There may be occasionally a spasm of the biliary tract produced by manipulation of the parietal peritoneum, while in other cases it is due to an emotional reflex. Icterus gravis is probably caused by the toxic action of the anesthetic, particularly chloroform, which attacks the hepatic cell already pathologically altered, and for this reason, before undertaking any surgical interference, the surgeon should look into the functional condition of the liver of his patients and resort to surgery only in cases of extreme urgency when the liver gives evidence of disease.

The Effects of Vaccine Therapy in Joint Tuberculosis.—Two years experience in the use of vaccine therapy as an adjunct in the treatment of joint tuberculosis has convinced Dr. Edward H. Ochsner of its efficiency. He says, in Illinois Medical Journal for Feb., 1909, that it has a threefold effect: First, it reduces the mortality; second, it hastens convalescence, and, third, it improves the ultimate functional results. He believes that if patients with joint tuberculosis come to the surgeon sufficiently early, if they are placed under proper hygienic conditions, if suitable measures are adopted for the preven-

tion of secondary infection, if the joints are perfectly immobilized for a sufficient length of time, and if vaccine therapy is instituted under control of the opsonic index, the great majority of cases will secure perfect or nearly perfect functional and anatomic results. Up to a few years ago we were very well satisfied if we were able to bring a case of simple tubercular arthritis to a successful healing of the tubercular process without surgical intervention, and we were quite satisfied if we accomplished this result with ankylosis, providiug the limb was ankylosed in a useful position. A larger joint with mixed infection sometimes resulted in the death of the patient, often in the loss of the limb and very commonly in persisting sinuses. But now we can practically always save the life and limb of such a patient and sometimes, even secure a useful joint. In tubercular joints uncomplicated with mixed infection, we can, if the patients come to us sufficiently early, secure perfect functional and anatomic results in the great majority of cases.

A Modified Fistula for Permanent Suprapubic Drainage.—In Post-Graduate for May, 1909, Dr. W. G. Eckstein describes a simple method of instituting suprapubic drainage by means of a permanent fistula, which will be practically water-tight, in hopeless cases of urinary incontinuence. It is in some respects a modification of the trocar method of Hunter McGuire, and has given perfect satisfaction in the one case in which the author has constructed it, so that after a lapse of eight months the patient is vastly improved and declares himself to be perfectly comfortable. The bladder is opened through a median incision, and whether or not an intravesical suture is made, the fistula is constructed as follows: A 24 to 28 French catheter is placed within the bladder at the lowest end of the vesical incision; the bladder is then closed by the usual suture, remaining open only at the situation of the catheter; the muscle and fascia are then closed by suture in a similar way, thus leaving an opening through the muscle, fascia, and bladder wall at the lowermost end of the incision. The catheter is then bent upwards in the median line and wrapped about loosely with gauze saturated with balsam of peru (to promote granulation). The skin is then sewn in the reverse way, beginning at the lowermost angle of the wound so as to allow the catheter to escape at the uppermost angle of the wound. This is allowed to remain in situ for several days, when it can be removed and replaced by another. After seven to ten days the catheter may be removed altogether, as there is then established a compressible canal, two to three inches long, running upwards from the water level and large enough to provide sufficient drainage. A pad similar to a hernia pad is then worn on a belt so as to make light compression on this canal which is thereby rendered absolutely water-tight. It is not only unnecessary, but injurious, to exert much pressure on this canal. The patient is then provided with two or three Nelaton catheters which he carries around with him in a suitable bottle filled with mercury oxycyanate or some other antiseptic. He is taught to care for and sterilize these instruments and can without difficulty insert the catheter through his fistula (owing to its situation and direction) and allow the urine to syphon out. It is also a very simple matter for him to daily lave the bladder with some mild solution. The author promises to publish illustrative cases in detail at some future time.

Vomiting in an insane person should always prompt an examination for hernia.—American Journal of Surgery.

HUMAN AND BOVINE TUBERCULOSIS.—We have seen many articles of late in the newspapers, by Mr. Strauss and others, which, without dilating upon the views of Koch and his opponents, certainly have the tendency greatly to overrate the danger to children from tuberculous cattle, and to draw the attention of the public away from the very real and important danger of human contagion. This subject was very thoroughly treated in a joint paper by Drs. Henry L. K. Shaw, and Arthur T. Laird of Albany, N. Y., in the section of tuberculosis in children of the National Association for the Study for the Prevention of Tuberculosis, at a meeting held in Washington about the middle of May. It was pointed out that if tuberculous milk was the chief cause, it was hard to understand how any children escaped infection. Every member of a tuberculous family should be examined and kept under surveillance. Infection might take place through the air or from the food, but association with tuberculous parents or other consumptives was probably by far the most common cause. Children, of course, were especially exposed to infection because of their irresistible impulse to place everything in their mouths. That bottle-fed infants acquired tuberculosis more frequently, was no necessary indication that they had been infected from the milk, as such babies had a greatly lessened resistance to any infection. If tuberculosis is really to be arrested, we must aim especially to prevent it during childhood.—The Post Graduate.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scentific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

Advertising forms close on the first and fifteenth of each month. Time should be allowed to submit proof for correction. Advertising rates on application.

Remittances and business communications should be addressed to the Fortnightly Press Co.

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Subscriptions may begin at any time; volumes end with June and December.

Contributors should understand that corrected typewritten copy is essential to clean proof and prompt publication, and is much more satisfactory than manuscript. Original articles should be as condensed as justice to the subject will allow.

Editorial offices in St. Louis and St. Joseph, where specimen copies may be obtained, and subscriptions will be received.

Contributions and books for review should be addressed to the Managing Editor, 319 and 320 Century Building, St. Louis, Mo.

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The twenty-first annual meeting of this association will be held in Council Bluffs, Iowa, on Thursday and Friday, September 9 and 10. The features of the evening session will be the President's address, by Dr. C. B. Hardin, Kansas City; the oration on Medicine by Dr. Alfred C. Croftan, and the Surgical oration by Dr. Jno. E. Summers. Dr. Croftan has chosen as his topic, "The Diseases of Metabolism as a Group," and Dr. Summers will discuss "Cancer as a Constitutional Disease; Its Rational Treatment." Much interest is already manifested in these papers, not alone because of the live topics expressed in their titles, but as well on account of the ability of the authors to present the latest views on these very important subjects. The papers of Drs. Summers and Croftan will be open for discussion. Programs will be issued August 25th, and the secretary will be glad to furnish copies on request. A cordial invitation is extended to the profession.

CHAS. WOOD FASSETT, Secretary,
St. Joseph, Mo.

At the annual commencement exercises of McGill University, Montreal, a class of 71 was graduated, and about 100 were graduated from Toronto. In the medical department of Toronto University there has been a great falling off in the freshman class, due, it is believed, to the recent establishment of the five-year course.

Subscription Renewals.—There has been a very generous response to our call for subscription renewals, indicating a tendency on the part of our readers to appreciate the efforts of the editor to make the Fortnightly a readable magazine. But—we regret to say—there are quite a number who have failed as yet to respond, and this may be taken as a gentle reminder that the post-office department now requires that every one who receives a magazine must be a subscriber—that is he must express a desire to receive the magazine, and indicate a willingness to pay for same, either in advance, or at the end of the year. The P.O. department is "no respector of persons," and we must abide its decision. After a reasonable length of time all subscribers names must be dropped from our list who do not sign a request for the journal to be continued to their address. Blanks were mailed to each subscriber recently, and another may be found in this issue that will serve the purpose.

STATE CARE OF THE INSANE IN JAPAN.—In a recent address to the Psychiatric Society of Tokio, Dr. Lilienstein stated that he had found many of the Japanese hospitals constructed after German models, and well managed, but that he was astonished to find apparently no provision made for the insane. According to his calculations, there should be among the 50,000,000 inhabitants, at least some 75,000 demented persons who should be in asylums, but even taking into account the private places, there is room only for about 2,000. Notwithstanding its wonderful army medical service, Japan seems to be very backward in comparison with Europe and America in this important department.

PERMANGANATE of potassium is thought to be practically a specific for snake bite in India. Only twenty-three deaths have occurred in one hundred ninety-eight cases treated with this medicament.

A Delightful Revelation

The value of senna as a laxative is well known to the medical profession, but to the physician accustomed to the ordinary senna preparations, the gentle yet efficient action of the pure laxative principles correctly obtained and scientifically combined with a pleasant aromatic syrup of Californian figs is a delightful revelation, and in order that the name of the laxative combination may be more fully descriptive of it, we have added to the name Syrup of Figs "and Elixir of Senna," so that its full title now is "Syrup of Figs and Elixir of Senna."

It is the same pleasant, gentle laxative, however, which for many years past physicians have entrusted to domestic use because of its non-irritant and non-debilitating character, its wide range of usefulness and its freedom from every objectionable quality. It is well and generally known that the component parts of Syrup of Figs and Elixir of Senna are as follows:

Syrup of Californian Figs..... 75 parts
Aromatic Elixir of Senna (manufactured by our original method, known to the California Fig Syrup Co. only).... 25 parts

Its production satisfied the demand of the profession for an elegant pharmaceutical laxative of agreeable quality and high standard, and it is, therefore, a scientific accomplishment of value, as our method ensures that perfect purity and uniformity of product required by the careful physician. It is a laxative which physicians may sanction for family use because its constituents are known to the profession and the remedy itself proven to be prompt and reliable in its action, acceptable to the taste and never followed by the slightest debilitation.

ITS ETHICAL CHARACTER.

Syrup of Figs and Elixir of Senna is an ethical Proprietary remedy and has been mentioned favorably, as a laxative, in the medical literature of the age, by some of the most eminent living authorities. The method of manufacture is known to us only, but we have always informed the profession fully, as to its component parts. It is therefore not a secret remedy, and we make no empirical claims for it. The value of senna, as a laxative, is too well known to physicians to call for any special comment, but in this scientific age, it is important to get it in its best and most acceptable form and of the choicest quality, which we are enabled to offer in Syrup of Figs and Elixir of Senna, as our facilities and equipment are exceptional and our best efforts devoted to the one purpose.

California Fig Syrup Co.,

Addresses:

Louisville, Ky. San Francisco, Cal. U. S. A. New York, N. Y.

London, Eng.

MEDICAL MEMORANDA.

Not alone does Triacol (Alpers) check the night sweats, hectic fever and coughing of phthisis pulmonalis, but it also causes the phlegm to become less adhesive, and the antiseptic properties of the guaiacol combination can also be noted upon the bacteria that are always found in the sputum of phthisical patients.

There can be no doubt but that elix. maltopepsine (Tilden's) is efficient in the highest possible degree in the treatment of cholera infantum and other forms of summer complaint with children. Information comes to us from the most trustworthy sources in the profession that this is a most reliable prescription, and we would advise those of our readers who are unfamiliar with this combination to investigate it thoroughly. In addition to its great value as a digestive ferment, elix. maltopepsine is an ideal vehicle and adjuvant to all forms of medication.

The Therapeutic Action of Prunoids.—Prunoids produce their excellent therapeutic results by stimulating secretions, increasing the fluid content of the feces and only gently increasing peristalsis. They are extremely palatable, easily taken by even young children, and when brought in contact with the secretions rapidly disintegrate and produce their specific medicinal effect. Probably one of the most gratifying features of prunoids is what for lack of a better term may be called their remote effect. While prompt and decided catharsis follows their administration in six or eight hours, a mild and salutary laxative influence is observed for several days after the final dose of prunoids. Other cathartic measures act just the reverse, and after their use the bowels invariably show greater lethary and sluggishness.

The Earliest Symptom of Enlarged Prostate.—Increased urinary frequency, chiefly nocturnal in character, is the earliest and most frequently encountered symptom of enlarged prostate. Many cases of hypertrophied prostate might never develop beyond this point if sanmetto was administered as a prophylactic, and the discomfort of rising two or three times at night to urinate, to say nothing of entering upon a catheter life, might be avoided. It is especially in the chronic prostatic hyperplasia which we find in old men, always associated with chronic vesical catarrh, that sanmetto gives the most brilliant results. Numbers of cases can be recited in which the use of sanmetto alone has not only relieved the vesical irritability, but has seemingly reduced the hypertrophy of the prostate and enabled the patient to dispense with catheterization and micturate unassisted for the first time in years.

Out of the Ordinary.—Abbott's saline laxative has two features which distinguish it from the common run of saline cathartics: First, when taken in cool (not cold) water immediately on rising, it acts once, in an hour or two (a clean, satisfying flush) and usually no more; whereas ordinary salines keep the patient busy all day long. The annoyance of this when one is away from home or busy in business is great. Besides, there does not seem to be any failure in the action of this saline when used continuously for long periods—no habit forming necessitating increase of dose, but rather the reverse. In one case a physician reports that he has taken a single teaspoonful of it every morning for 12 years, and still finds that does amply sufficient to maintain regularity in his bowels. In the trade everywhere. Samples sent to interested physicians by the Abbott Alkaloidal Co. (Chicago) on request.

The Child That Fails to Thrive is one of the many troublesome and vexatious clinical puzzles that the family practitioner is called upon to solve. Malnutrition, slow growth and development, sluggish metabolism, unusual susceptibility to digestive and respiratory disorders, mental dulness, physical lassitude and lack of snap and ambition, constitute a clinical picture that every physician of experience will readily recognize. To arrive at any definite determination in regard to the treatment of such a patient, a careful and thorough physicial examination is essential, in order that any of the causes which act reflexly through the nervous system may be discovered and properly dealt with—post-nasal adenoids, a redundant prepuce, ascarides, eye strain, as well as other local irritations, may be more or less responsible for the child's backwardness, both mental and physical; constitutional diatheses, such as syphilis, tuberculosis and lithemic states, should also be looked for and intelligently treated. After the discovery and removal of the cause, tonic and reconstituent treatment is almost invariably indicated and among the reconstructives especially adapted to the delicate digestive organs of the under-nurtured child, pepto-mangan (Gude) is easily first. Its iron and manganese content exists in organo-plastic combination with peptones, and the preparation, as a whole, is so pleasant and readily tolerable as well as immediately and wholly assimilable, that children of all ages take it readily and benefit materially from its corpuscle-building and hemoglobin-contributing power. Unlike most iron-containing remedies, it does not injure the the teeth nor cause constipation.